CHAPTER 9E

WOOD FLOORING

9E-01. GENERAL

a. References

- (1) Grade markings must be checked and grading, too. You will need the publication describing grading rules. Check the specification for the publication title.
- (2) Wood block flooring requirements are found in ASTM D1031.
- (3) Be aware of special requirements for wood flooring for gymnasiums and hand ball courts.

b. Submittals

- $\left(1\right)$ Samples of the proposed flooring are needed for approval.
- (2) It is Important that the floor manufacturer*s installation instructions are received, approved and used.

9E-02. MATERIALS

a. Strip Flooring

- $\left(1\right)$ Optional wood species may be listed for contractor*s selection.
- (2) Check thickness as it may be 3/4 inch up to 33/32 inch.
 - (3) Check grade on the trademark.

b. <u>Parquet Flooring</u>

- (1) Slat-block flooring is available in a variety of patterns. Check the finish schedule. These pre-assembled units are made with solid wood slats.
- (2) Solid-block flooring is 9-inch squares of pre-assembled strip flooring material.
- (3) Check the trademark grade for conformance. Check the grading rules should there be any doubt of the quality.
- $\left(4\right)$ Flooring may be pre-finished or unfinished. Check the specifications.

c. Block Industrial Flooring

- $\mbox{(1)}\mbox{ Beveled corners are usually specified for our use.}$ Bevel extends through full thickness.
- (2) Contractors may select wood specie or, or heavy use, upland oak will be required.

(3) Check for required preservative treatment stamp on bundles.

d. Primer and Adhesive

- (1) Used for installation over concrete and the type material will be as recommended by the flooring manufacturer.
 - (2) Check storage requirements on container labels.

e. Filler

- $\ \, (1)\ \,$ Manufacturer*s recommended filler is applied to completed industrial block flooring.
- $\ \ (2)$ Asphaltic filler of steep-slope asphalt may be required for gymnasium and hand ball courts.
- $\ \,$ (3) Check for a polyethylene sheet vapor seal or water proofing membrane in lieu of the filler. Insulation board may also be required.

f. Wood Sleepers and Nails

- (1) Check for preservative treatment. Specific type treatment and maximum moisture content must be enforced.
 - (2) Check specie and grade required.

g. Steel Channels and Clips

- $\mbox{(1)}\mbox{ }\mbox{ Manufacturers}$ system may use steel channels and clips to attach flooring to sub-floor.
- (2) Check system for required pads beneath the anchor channels.
 - (3) Steel components must be galvanized.
- (4) Insulation between channels will be either asphalt impregnated fiberboard or closed cell polyethylene foam.

h. Storage

- (1) Accept only unopened and correctly labeled packages.
- (2) Check for storage in a dry ventilated location.
- (3) Check for flooring moisture content between 6 and 9 percent.

9E-03. PREPARATION

- a. Building must be completely enclosed.
- b. Flooring installation must be phased after other operations are completed.
- c. Building temperature must be between 65 and 80 degrees F, before, during and after floor installation. Check your requirements as the maximum temperature for certain systems may be 72 degrees F.

- d. Correct concrete sub-floor defects and remove residue from curing compounds and sealers before adhesive application. Check for concrete drying requirements before flooring installation can begin.
- e. Check joints or sleepers for level plane surfaces before installing sub-flooring and underlayment.
- f. Check Chapter 6A for sub-flooring and underlayment installation.
 - g. Check for loose sub-flooring and raised nails.
- h. Where boards are used for sub-flooring, check for cupping. Replacement must be required where additional nailing will not correct the problem. Is diagonal installation required?
- Review specifications for waterproofing or vapor barrier provisions.

9E-04. INSTALLATION

a. Strip Flooring

- (1) Check for layout; perimeter space for expansion and for laying strips parallel to length of room area.
- (2) Check anchor channel or sleeper fastening for rigidity. Check for spacing of cushion pads.
- (3) Check for 6 inch minimum stagger at end joints at adjacent strips.
- $\left(4\right)$. Separate end joints in the same plane with at least two rows of strip-flooring.
- (5) Check for required size nail or clip. Does nail have a deformed shank? Nails shall be countersunk. Check nail spacing and use at least 2 nails per strip section.
- (6) Fit-up shall be close and snug. Follow manufacturers specific installation instructions.
- (7) Check for and enforce the special color matching requirements for installing flooring on walls of handball courts.

b. Parquet Flooring

- (1) Is a checkerboard layout required? Check for perimeter space for expansion.
- (2) Prepare for and spread adhesive in accordance with the flooring manufacturers installation instructions.

c. Block Industrial Flooring

- (1) A special requirement is storage within the area of installation for at least 7 days before application begins. Check for specific temperatures and humidity conditions required.
- (2) Manufacturer*s specific instructions for primer, adhesive and block application must be enforced.

EP 415-1-261 1 Aug 92

- (3) Check for alignment in parallel rows or courses. Break joints in adjacent courses as in masonry layup.
- $\left(4\right)$ Check for expansion space at perimeter and at all obstructions such as columns.

d. Sanding and Sealing

- (1) sanding passes shall be as specified and by skilled mechanics for smooth and uniform surfaces and without sanding marks or shiners.
- (2) Check schedule of sanding such that required sealer coat is applied within 8 hours after final sanding pass. This is important to prevent moisture absorption which will cause the grain of the wood to rise.
- $\,$ (3) $\,$ Dry clean floor surfaces thoroughly, including all shoe and boot marks, immediately before sealing.
- $\mbox{(4)}$ Block industrial flooring requires at least two coats of filler applied in accordance with the flooring manufacturer*s instructions.
- (5) Check for required protection. The correction of damaged floors is only second best. Prevent damage with adequate protection.
- (6) Check carefully on the operations of subcontractors or the Using Service where equipment such as refrigerators, washing machines, cooking stoves, kitchen cabinets and similar equipment is being installed after installation of finish flooring. These items shall be lifted into place, not dragged!